

**Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

**STATE ORIGIN
AIR QUALITY PERMIT**

Permittee Name: SKF USA, Incorporated

Mailing Address: 1001 Happy Valley Road
Glasgow, KY 42141

Source Name: SKF USA, Incorporated
Mailing Address: 1001 Happy Valley Road
Glasgow, KY 42141
Source Location: Same

Source ID#: 21-009-00031
SIC Code: 3562

Regional Office: Bowling Green Office
1508 Western Avenue
Bowling Green, KY 42104-3356
(270) 746-7475

County: Barren

Permit #: S-00-133 (Revision 1)
Log #: 55408
Permit Type: Minor Source Construction/Operating

Application
Complete Date: August 30, 2000
Issuance Date: July 25, 2002
Revision Date: April 23, 2003
Expiration Date: July 25, 2012

**John S. Lyons, Director
Division for Air Quality**

SECTION A – PERMIT AUTHORIZATION

Pursuant to a duly submitted application, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes, Chapter 224, and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state or local agency.

Definitions: The following definitions apply to all pollutant listed in this permit:

- a. PT – total particulate matter
- b. PM₁₀ – particulate matter equal to or smaller than 10 micrometers
- c. CO – carbon monoxide
- d. NO_x – nitrogen oxides
- e. SO₂ – sulfur dioxide
- f. Pb – lead
- g. VOC – volatile organic compounds

**SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS,
AND OPERATING CONDITIONS****GROUP REQUIREMENTS: HBU II Area****01 (601) HBU II Outer Ring Line, construction commenced: 1995**

Description: The emission point is a fabrication line consisting of two (2) parts washers, one (1) induction/quench tank, one (1) drilling station, four (4) turning stations, two (2) grinding stations, two (2) honing stations and one (1) DX110 washer. Mist eliminators control all unit emissions with 95% efficiency for PM10, PT and VOC.

02 (601) HBU II Inner Ring Line, construction commenced: 1995

Description: The emission point is a fabrication line consisting of two (2) DX110 washers, six (6) grinding stations and three (3) honing stations. Mist eliminators control all unit emissions with 95% efficiency for PM10, PT and VOC.

03 (601) HBU II Finishing Line, construction commenced: 1995

Description: The emission point is a finishing line consisting of one (1) DX110 washer, one (1) dip tank and maintenance cleaning. Mist eliminators control all unit emissions with 95% efficiency for PM10, PT and VOC.

Annual hours of operation: 8760 hours/year

Control Device: Mist eliminator

Emission Sources:	Max Throughputs:	Pollutants:
Machine Cleaner 102 LK-6	0.010 gal/hr	PM10, PT, VOC
Aqua Quench	0.016 gal/hr	PM10, PT, VOC
Castrol 6514	1.225 gal/hr	PM10, PT, VOC
Tyson #1	0.105 gal/hr	PM10, PT, VOC
Honilo 480	0.577 gal/hr	PM10, PT, VOC
Exxsol D110	0.159 gal/hr	PM10, PT, VOC
Ferrocote 368-K-3	0.026 gal/hr	PM10, PT, VOC
5000 Plus	0.725 gal/hr	PM10, PT, VOC

GROUP REQUIREMENTS: HBU III Area**04 (602) HBU III Inner/Outer Ring Line, construction commenced: 1995**

Description: The emission point is a fabrication line consisting of two (2) parts washers, two (2) induction/quench tank, two (2) drilling station, six (6) turning stations, four (4) grinding stations and four (4) honing stations. Mist eliminators control all unit emissions with 95% efficiency for PM10, PT and VOC.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**05 (602) HBU III Small Ring Line, construction commenced: 1995**

Description: The emission point is a fabrication line consisting of four (4) grinding stations and four (4) honing stations. Mist eliminators control all unit emissions with 95% efficiency for PM10, PT and VOC.

06 (602) HBU III Finishing Line, construction commenced: 1995

Description: The emission point is a finishing line consisting of two (2) thirty gallon washers, one (1) dip tank and maintenance cleaning. Mist eliminators control all unit emissions with 95% efficiency for PM10, PT and VOC.

Annual hours of operation: 8760 hours/year

Control Device: Mist eliminator

Emission Sources:	Max Throughputs:	Pollutants:
Machine Cleaner 102 LK-6	0.010 gal/hr	PM10, PT, VOC
Aqua Quench	0.016 gal/hr	PM10, PT, VOC
Castrol 6514	0.98 gal/hr	PM10, PT, VOC
Tyson #1	0.079 gal/hr	PM10, PT, VOC
Honilo 480	0.462 gal/hr	PM10, PT, VOC
Castrol Kleen 3414	0.524 gal/hr	PM10, PT, VOC
Ferrocote 368-K-3	0.026 gal/hr	PM10, PT, VOC
5000 Plus	0.725 gal/hr	PM10, PT, VOC

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations. Applicable to visible and particulate emissions from each emission point (listed above) commenced on or after July 2, 1975.

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. ***Opacity Standard:*** Section 3 (1), visible emissions shall not equal or exceed 20 percent opacity, as determined with Reference Method 9, Appendix A 40 CFR 60.

Compliance demonstration: The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points 4.

Specific Monitoring Requirements and 5. **Specific Record Keeping Requirements** below.

- b. ***Mass Emission Standard for particulate emissions from all emission points:*** Section 3 (2), hourly particulate emissions for each emission point as measured by

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Reference Method 5, Appendix A 40 CFR 60, shall not exceed the limit calculated by the following equation:

$$E = 3.59 \cdot P^{0.62}$$

Where E is the particulate emission in lbs/hour and P is the process weight (i.e. the maximum amount of solid scraps/wastes produced or maximum amount of output product) in tons/hour. If the process weight is less than or equal to 0.5 ton/hour, the particulate matter emission limitation shall be 2.34 lbs/hour.

Compliance demonstration: Section 4 (5), the process weight shall be determined in average hourly tons by averaging the daily process weight rate over daily hours of operation. Particulate emissions shall be calculated by the following equation:

$$E = P \cdot EF$$

Where E is particulate emissions in lbs/hr, P is averaged process weight in tons/hr and EF is the KYEIS particulate emission factor in lbs/ton of process weight.

3. **Testing Requirements:** Pursuant to Regulations 401 KAR 61:005 Section 2 (2) and 401 KAR 50:45 Section 1, performance testing using the Reference methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the Division.
4. **Specific Monitoring Requirements:** Weekly observations of visible emissions from the roof exhaust operation shall be made.
5. **Specific Record Keeping Requirements:** A log shall be kept of all visible emissions observations. Notification in the weekly log shall be made of, but not limited to the following:
 - a. Whether any air emissions (except for water vapor) were visible from the plant.
 - b. Whether the visible emissions were normal for the process.
 - c. The cause of any abnormal emissions and any corrective actions taken.
6. **Specific Reporting Requirements:** See SECTION C below.
7. **Specific Control Equipment Operating Conditions:** None
8. **Alternate Operating Scenarios:** None
9. **Compliance Schedule:** None
10. **Compliance Certification Requirements:** See SECTION C below.

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**GROUP REQUIREMENTS:****07 (701406) Boiler, construction commenced: 1995**

Description: The emission point is a boiler with a rated heat capacity of 10.5 MMBTU/hr. There are no associated control devices

Annual hours of operation: 8760 hours/year

Control Device: None

Emission Sources:

Natural gas

Max Throughputs:

0.011 10⁶ ft³/hr

Pollutants:

PM10, PT, CO, NO_x, SO₂, Pb, VOC

APPLICABLE REGULATIONS:**401 KAR 59:015 New indirect heat exchangers.**

Applicable to visible and particulate emissions from each emission point (listed above) commenced on or after 9 April 1972 as follows:

1. **Operating Limitations:** None.

2. **Emission Limitations:**

- a. **Opacity Standard:** Section 4 (2), visible emissions, as measured by Reference Method 9, Appendix A 40 CFR 60, shall not equal or exceed 20 percent opacity except a maximum of 40 percent opacity shall be permissible for not more than 6 consecutive minutes in any 60 consecutive minutes during cleaning or while building a new fire.

Compliance demonstration: The permittee shall demonstrate compliance through monitoring and maintenance of the records as specified in points 4. **Monitoring Requirements** and 5. **Record Keeping Requirements** below.

- b. **Mass Emission Standard for particulate emissions:** Section 4 (1)(a), hourly particulate emissions, as measured by Reference Method 5, Appendix A 40 CFR 60, for each point shall not exceed 0.56 lb/million BTU actual heat input.

Compliance demonstration: The permittee shall monitor the amounts and types of process fuels combusted. Particulate emissions shall be calculate by:

$$PM = A \cdot B / (C \cdot D)$$

Where PM is particulate emissions in lbs/hr, A is the annual total fuel input rate in million BTU /hr, B is the KYEIS particulate emission factor in lb/10⁶ ft³, C is the

SECTION B – AFFECTED FACILITIES, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

actual heat input capacity of the heat exchanger in million BTU/hr, and D is the hours of operation per year.

- c. *Sulfur Dioxide Standard:* Section 5 (1)(a), hourly SO₂ emission, as measured by Reference Method 6, Appendix A 40 CFR 60, for each point shall not exceed 3.0 lb/million BTU actual heat input for the combustion of liquid or gaseous fuels.

Compliance demonstration: The permittee shall monitor the amounts and types of process fuels combusted. Sulfur dioxide emissions shall be calculate by:

$$SO_2 = A \cdot B / (C \cdot D)$$

Where SO₂ is sulfur dioxide emissions in lbs/hr, A is the annual total fuel input rate in million BTU/hr, B is the KYEIS sulfur dioxide emission factor in lb/10⁶ ft³, C is the actual heat input capacity of the heat exchanger in million BTU/hr, and D is the hours of operation per year.

3. **Testing Requirements:** None.
4. **Monitoring Requirements:** None.
5. **Record Keeping Requirements:** Records shall be maintained of the daily total fuel input and daily hours of operation.
6. **Reporting Requirements:** Any exceeding of the particulate or sulfur dioxide emission limit as stated in the permit shall be reported to the Division within 30 days of the event as specified in **SECTION C** below.
7. **Specific Control Equipment Operating Conditions:** See **SECTION C** below.
8. **Alternate Operating Scenarios:** None
9. **Compliance Schedule:** None
10. **Compliance Certification Requirements:** See **SECTION C** below.

SECTION C – GENERAL CONDITIONS

A. Administrative Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:040, Section 3(1)(b) and is grounds for enforcement action including but not limited to the termination, revocation and re-issuance, or revision of this permit.
2. This permit shall remain in effect for a fixed term of ten (10) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division. [401 KAR 52:040, Section 15].
3. Any condition or portion of this permit that becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 11]
4. Pursuant to materials incorporated by reference by 401 KAR 52:040, this permit may be revised, revoked, reopened, reissued, or terminated for cause. The filing of a request by the permittee for any permit revision, revocation, re-issuance, or termination, or of a notification of a planned change or anticipated noncompliance shall not stay any permit condition. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 4,5]
5. This permit does not convey property rights or exclusive privileges. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
6. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 52:040 Section 11(3)]
7. This permit shall be subject to suspension at any time the permittee fails to pay all fees within 90 days after notification as specified in 401 KAR 50:038, Air emissions fee. The permittee shall submit an annual emissions certification pursuant to 401 KAR 52:040, Section 20.
8. All previously issued construction and operating permits are hereby subsumed into this permit.

B. Record Keeping Requirements

1. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of at least five

SECTION C – GENERAL CONDITIONS

years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 52:040 Section 3(1)(f)]

2. The permittee shall perform compliance certification and record keeping sufficient to assure compliance with the terms and conditions of the permit. Documents, including reports, shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21.

C. Reporting Requirements

- a. In accordance with the provisions of 401 KAR 50:055, Section 1:
 - G. The permittee shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
 - H. The permittee shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Reporting Requirement condition 1 a) above), the probable cause of the deviation, and corrective or preventive measures taken; to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report. [Material incorporated by reference by 401 KAR 52:040, Section 5, 3].
2. The permittee shall furnish information requested by the cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or compliance with the permit. [Material incorporated by reference by 401 KAR 52:040, Section 1a, 8].
3. Summary reports of monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation. The summary reports are due January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:040, Section 21. All deviations from permit requirements shall be clearly identified in the reports.

SECTION C – GENERAL CONDITIONS

D. Inspections

1. In accordance with the requirements of 401 KAR 52:040, Section 3(1)(f) the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times are defined as during all hours of operation, during normal office hours or during an emergency.
 - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

E. Emergencies/Enforcement Provisions

1. The permittee shall not use as defense in an enforcement action, the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Material incorporated by reference by 401 KAR 52:040, Section 1a, 3].
2. An emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency and included a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
3. Emergency provisions listed in General Condition E.2 are in addition to any emergency or upset provision contained in an applicable requirement.
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

F. Compliance

SECTION C – GENERAL CONDITIONS

1. Periodic testing or instrumental or non-instrumental monitoring, which may consist of record keeping, shall be performed to the extent necessary to yield reliable data for purposes of demonstration of continuing compliance with the conditions of this permit. For the purpose of demonstration of continuing compliance, the following guidelines shall be followed:
 - a. Pursuant to 401 KAR 50:055, General compliance requirements, Section 2(5), all air pollution control equipment and all pollution control measures proposed by the application in response to which this permit is issued shall be in place, properly maintained, and in operation at any time an affected facility for which the equipment and measures are designed is operated, except as provided by 401 KAR 50:055, Section 1.
 - b. All the air pollution control systems shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers. A log shall be kept of all routine and non-routine maintenance performed on each control device.
 - c. A log of the monthly raw material consumption and monthly production rates shall be kept available at the facility. Compliance with the emission limits may be demonstrated by computer program, spread sheets, calculations or performance tests as may be specified by the Division.
2. Pursuant to 401 KAR 52:040, Section 19, the permittee shall certify compliance with the terms and conditions contained in this permit by January 30th of each year, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period, and
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality	Division for Air Quality
Bowling Green Office	Central Files
1508 Western Avenue	803 Schenkel Lane
Bowling Green, KY 42104-3356	Frankfort, KY 40601-1403
3. Permit Shield - A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with all:

SECTION C – GENERAL CONDITIONS

- a. Applicable requirements that are included and specifically identified in this permit; or
- b. Non-applicable requirements expressly identified in this permit.

G. Construction Requirements:

1. Pursuant to 401 KAR 52:040, Section 12(3), unless construction is commenced on or before 18 months after the date of issue of this permit, or if construction is commenced and then stopped for any consecutive period of 18 months or more, or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon a written request, the cabinet may extend these time periods if the source shows good cause.
2. Pursuant to 401 KAR 52:040, Section 12(4) and 401 KAR 59:005, General provisions, Section 3(1), within 30 days following construction commencement, within 15 days following start-up and attainment of maximum production rate, or within 15 days following the issuance date of this permit, whichever is later, the owner and/or operator of the affected facilities specified on this permit shall furnish to the Bowling Green Regional Office, with a copy to the Division's Frankfort Central Office, the following:
 - a. Date when construction commenced, (See General Condition G.1).
 - b. Start-up date of each of the affected facilities listed on this permit.
 - c. Date when maximum production rate was achieved, (See General Condition G.3.b).
3. Pursuant to 401 KAR 59:005, General provisions, Section 2(1), this permit shall allow operation for compliance demonstration of the affected facilities listed herein. However, within 60 days after the issuance date of this permit or the date of achieving the maximum production rate at which the affected facilities will be operated, whichever is later, but no later than 180 days after initial start-up of such facilities, or the issuance date of this permit, whichever is later, the owner or operator shall demonstrate compliance to a duly authorized representative of the Division.

Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days after the completion of the fieldwork.

4. Operation of the affected facilities authorized by this permit shall not commence until compliance with applicable standards specified herein has been demonstrated in accordance with the requirements of 401 KAR 52:040, Section 12(4)(b). Until compliance is demonstrated, the source may only operate for the purpose of demonstrating compliance.

SECTION D – INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:040, Section 6. While these activities are designated as insignificant the permittee shall comply with the applicable regulation and any level of periodic monitoring specified below.

None